



2021 Sheridan Angler Newsletter



"From the Bighorns to the Black Hills"

Special points of interest:

- New Interactive Fishing Guide available.
- The Master Angler Program continues to grow!
- Cloud Peak Wilderness lakes and alpine reservoir surveys.
- Watercraft Inspection training for the public.
- How to stock your private pond.

Inside this issue:

Habitat projects in the Sheridan Region **2**

North Tongue River troubles **5**

FAQs **6**

Muddy Guard #1 update **7**

Middle Fork Powder River update **8-9**

Lake DeSmet update **10**

Healy Reservoir update **11**

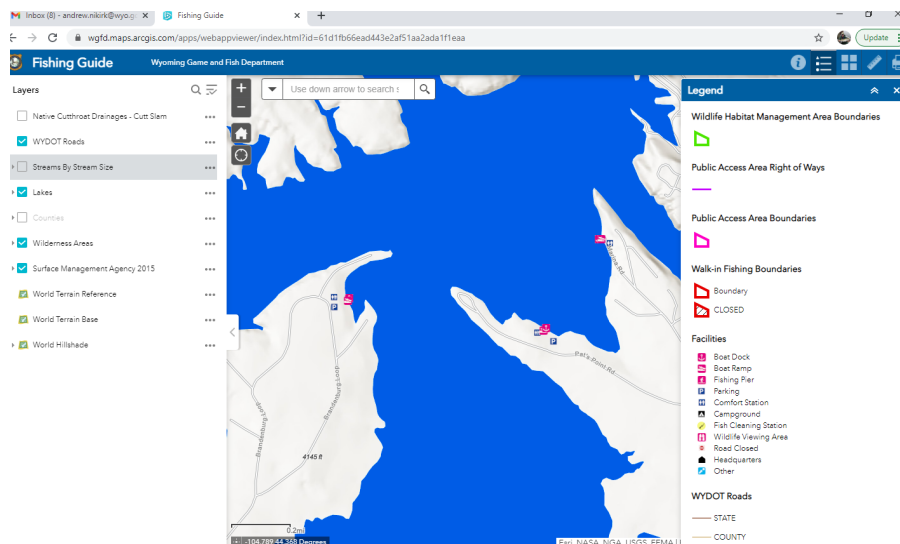
New Interactive Fishing Guide

Are you thinking of visiting Wyoming for a fishing trip? Are you the diehard wilderness angler looking for that next Golden Trout water? The Wyoming Game and Fish Department has developed a new tool to help anglers find their next destination. Our new Interactive Fishing Guide will give you a ton of information with a simple click. Simply visit our website at www.wgfd.wyo.gov. From there, click on 'Fishing and Boating' (blue box at the top of the screen), then click on "Places to fish and boat in Wyoming" (green box). Lastly, click on the Interactive Fishing Guide link, and you are there.

The Interactive Fishing Guide was created to help anglers explore the wealth of Wyoming fishing opportunities. The simplest features allows users to select a water to see the species of fish present at that water. Click the 'Zoom-to' feature (at the bottom of the species present box) and the available facilities such as boat ramps, camping, and comfort stations will appear on the screen. Every water that you click on is also linked to our Fishing Regulations and the contact information for the specific regional office should you have additional questions (at the bottom of the species present box).

Several GIS layers are available with this fishing guide to assist you in narrowing down a new location to fish. For instance, if you are thinking of fishing a Wilderness area, simply turn on the Wilderness Areas layer. From there you can click on individual lakes and streams to see where that elusive Golden Trout lives. Perhaps you're interested in completing our Cutt-Slam. Simply turn on the Native Cutthroat Drainages layer and you'll see the native drainages and waters for our four native cutthroat subspecies. To speed up your search, use the search feature at the top of the screen. Here you can search lakes and streams by species present or by water name. For instance, typing Tiger Musky into the search box brings up the 14 Wyoming lakes with that species.

So, give our new Interactive Fishing Guide a try the next time you're looking for a new water to fish. And as always, Happy Fishing!



Keyhole Reservoir in our Interactive Fishing Guide. Map layers (left) can be turned on or off, while the legend (right) will help you find helpful items such as boat ramps and public roads.

How To Stock Your Private Pond



Rainbow Trout are the most popular fish stocked in private ponds. The bigger the fish to be stocked, the more expensive it will be for the landowner.

One of the questions we get several times a year is how a landowner can stock their private pond. Many landowners think they can get fish from a Game and Fish (GF) hatchery but that is not the case. All the fish the GF raises are used in publically accessible waters. For private waters, a landowner needs to get a free permit from the GF and buy fish from a list of GF approved private hatcheries.

We encourage landowners to first review the list of private hatcheries that can be found at: <https://wgfd.wyo.gov/Fishing-and-Boating/Private-Fish-Stocking>. The hatcheries on this list are disease certified to ensure only healthy fish are stocked. Contact the private hatchery for species, size and cost.

Once you decide on what fish species you want to stock, then fill out the Private Stocking Application. The private stocking application is on the GF website at: https://wgfd.wyo.gov/WGFD/media/content/PDF/Fishing/Private-Fish-Stocking-Application-Form_Dec-2017.pdf

Out of an abundance of caution to the impacts escaped fish may have on the states fisheries, not all fish species are permitted in certain drainages. The turnaround time for the application is 10 business days or less.

Once the application is approved, a permit is sent to the landowner and the private hatchery that authorizes the landowner and private hatchery to legally stock the private water.

If you have questions about the process outlined above or questions on species, sizes, etc., please give us a call at the Sheridan Office at 672-7418.

“Contact the private hatchery first to get an idea of species availability, timing, and cost”



A friendly reminder for anglers and private land/pond owners. It is always illegal to move live fish yourself without authorization from the WGFD; even to your private pond.



The 800 foot by-pass channel constructed on lower Clear Creek. The by-pass channel allows fish passage for numerous species around Kendrick Dam.

Barriers; remove or build?

Barriers, natural or manmade, impede fish movement in streams. Whether it be a natural waterfall in Box Canyon on the Tongue River (impeded Yellowstone Cutthroat Trout) or a manmade diversion dam (Kendrick Dam on lower Clear Creek, impeded numerous species like Sauger and Channel Catfish). The Wyoming Game and Fish Department has taken many steps to remove barriers or provide passage around diversion dams in recent years. On lower Clear Creek, an 800 foot by-pass channel was constructed to allow fish access to an additional 36 miles of stream (picture left). On upper Clear Creek, a concrete ramp just upstream of I-25 is scheduled for removal in 2021, allowing trout and other species to move freely.

But when is barrier a good thing? When is it appropriate to actually keep fish from moving? In 2019 and 2020, a permanent fish barrier was completed on West Pass Creek. This barrier will isolate a remnant population of Yellowstone Cutthroat Trout from other nonnative trout species (Rainbow, Brown, and Brook). We have very few remnant populations of cutthroat left in the Bighorns. Isolating them is the only way to keep them on the landscape. Refer to [page 3](#) for more information on these projects.

Habitat Projects in the Sheridan Region

Clear Creek Rehabilitation and Fish Passage at Interstate 25

A 12-foot tall concrete grade control structure is on Clear Creek upstream of the Interstate 25 box culvert crossing (Figure 1) and is a barrier to upstream fish movements. Engineering designs were completed during 2020 to replace the structure with a series of riffle-like boulder structures spaced in a series and separated by pools. The new channel between County Road 252 and Interstate 25 will allow adult Brown and Rainbow trout and native suckers to access upstream habitats along 9.7 miles of Clear Creek. The work will also improve stream habitat available to the public along three and one half acres of Clear Creek owned by the Wyoming Department of Transportation. Stayed tuned for updates on this project in future newsletters.



Figure 1. The 12 foot concrete ramp located just upstream of Interstate - 25 on Clear Creek in Buffalo, WY. The removal of the ramp will allow fish movement throughout Clear Creek.

West Pass Creek YSC Restoration Infrastructure Development

A fish barrier was completed on West Pass Creek in 2019 to prevent other trout species from moving upstream and mixing with native Yellowstone Cutthroat Trout. The barrier secured six miles of stream along the North and South forks, and main stem of West Pass Creek for the restoration of native Yellowstone Cutthroat Trout. Final site rehabilitation, which included seeding, mulching and temporarily fencing the site, was completed in 2020 (Figure 2). Trout restoration work within the creek upstream of the barrier is ongoing.



Figure 2. Fish barrier fully completed in 2020 to isolate Yellowstone Cutthroat Trout from other trout species.

Reub Ranch Riparian Improvement on Middle Crazy Woman Creek

The headwaters of the Middle Fork of Crazy Woman Creek is important summer range for mule deer in the Upper Powder River herd. A portion of the population migrates to the upper elevations of the Middle Fork of Crazy Woman Creek every summer to capitalize on the high quality forage. Currently, the decline in mesic (wetter/abundant moisture) riparian areas along the creek limits the forage value of this area. Beavers, with their dam building behavior, can have a large impact in water distribution in mountain meadows. Beaver dams are able to slow floodwater and distribute it throughout the riparian system, thus reconnecting riparian floodplains, increasing the size of mesic areas, and providing habitat for riparian vegetation. In order to restore riparian floodplain connectivity and increase desirable conditions for riparian plant growth, the WGFD completed 10 Beaver Dam Analog (BDA) treatment complexes along the Middle Fork of Crazy Woman Creek on the Reub Ranch (Figures 3 and 4). The intent was to mimic beaver dams to detain and redistribute water during high flows, stimulate riparian plant growth and increase the size of the mesic riparian areas. Through the installation of the BDAs, we anticipate increased growth and canopy cover of willow and aspen, which will increase habitat suitability for beaver. If beaver eventually occupy this section of stream (they currently persist upstream), they will help elevate the water table further and enhance riparian habitats available for fish and various wildlife.



Figures 3 and 4. Construction of a beaver dam analog (BDA; picture left) and a completed BDA (picture right). BDAs will help retain water longer on the landscape, elevating the water table, and benefiting fish and wildlife.

Master Angler Program Grows In 2020!

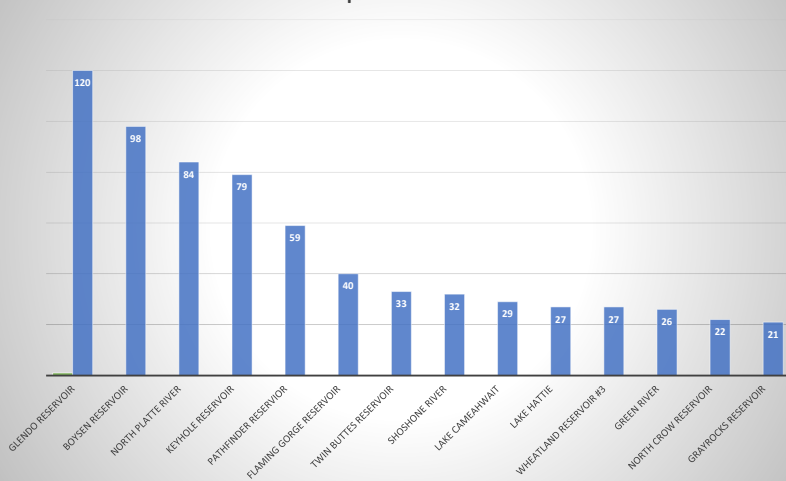
The Wyoming Game and Fish Department instituted the Master Angler Program on June 1, 2019 to recognize the catch of trophy-sized fish from Wyoming's amazing waters. There are three levels of achievement; Master Angler (one fish entry), Trophy Angler (five entries of different species), and Ultimate Angler (ten entries of different species). In that inaugural year, 483 anglers submitted successful entries for Master Angler with ten Trophy Anglers and one Ultimate Angler. The program certainly grew in popularity in 2020 as there were 1,113 Master Angler entries, 44 Trophy Angler entries, and 7 Ultimate Angler entries!!

Glendo Reservoir led the way with 120 entries followed by Boysen, the North Platte River, Keyhole, and Pathfinder. Rainbow Trout led the way as the most common species entered by anglers (293), followed by Cutthroat Trout (136), Walleye (112), Crappie (103), and Brown Trout (87). Anglers from all across the country submitted successful entries with Wyoming (994), Colorado (41), and Utah (16) having the most entries.



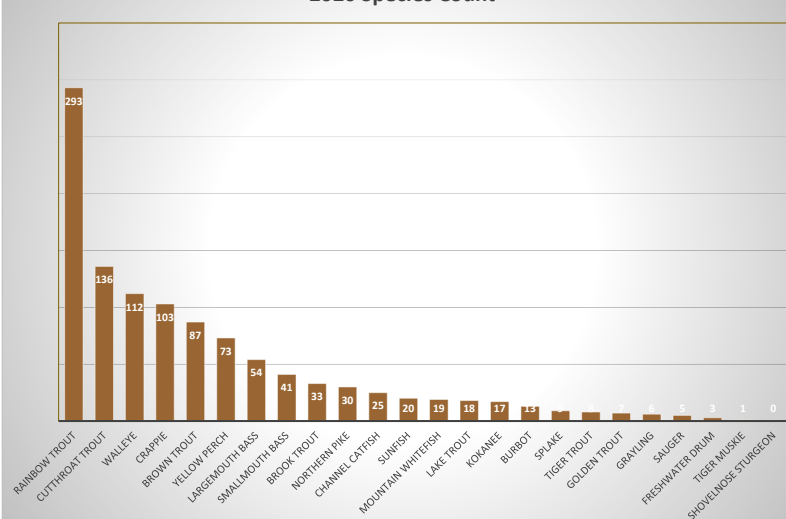
Todd Pomeroy with his 43 inch Master Angler Northern Pike from Keyhole Reservoir

Top Waters 2020



The top 14 waters with the most Master Angler entries (above) and the number of entries submitted by species (below).

2020 Species Count



The rules are pretty simple. 1) The Master Angler Program is open to resident and nonresident anglers. 2) Fish must be caught with legal methods and during open seasons in Wyoming. 3) Anglers are limited to one Master Angler entry per species per calendar year. Submissions for Trophy Angler and Ultimate Angler have no time limitations. 4) Each entry must be accompanied by one side-view photograph, preferably with either the angler or another object (e.g. ruler) that can be used to validate length. 5) Qualifying fish must meet or exceed the minimum length established for that species. Length is defined as total length of the fish, from snout to the tip of a pinched tail.



2021 is shaping up to be another excellent year to be on the water. Get out there and see if you can be a Master, Trophy, or Ultimate Angler! For more information visit our website at <https://wgfd.wyo.gov/Fishing-and-Boating/Master-Angler>



North Tongue Troubles

With the ease of access, the beautiful scenery, and the good-sized trout, the North Tongue River is one of the most popular waters in the Bighorn Mountains. Over the last ten years however, we have documented a downward trend in population (numbers of fish/mile) and biomass (pounds of fish/mile). Wild populations ebb and flow, sometimes drastically, but will generally stabilize over time. Over the last decade this downward trend has not recovered. And the same trend has been observed within, and outside the Catch and Release sections of river.

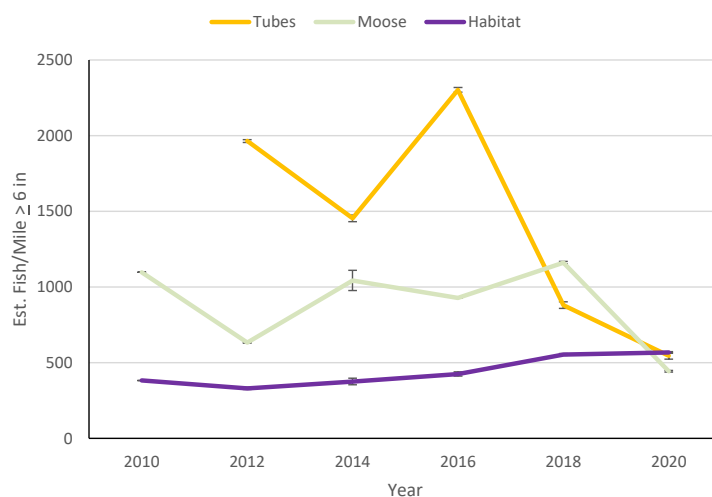
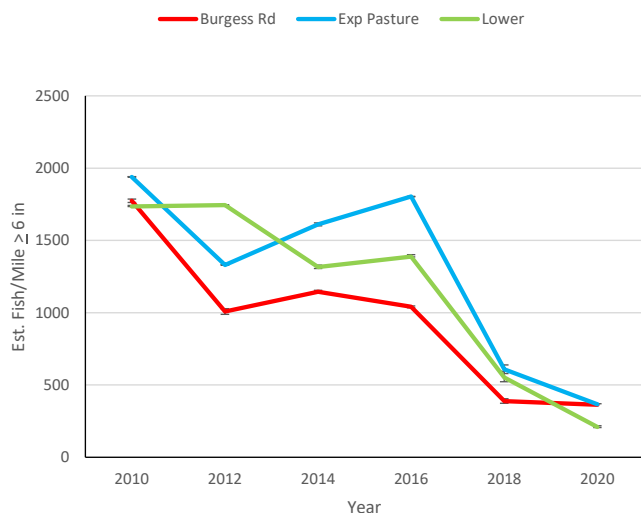
It is unclear what is causing the decline in fish abundance as there does not appear to be a “smoking-gun”. It is most likely a combination of factors including natural variability (the natural ups and downs of a population), environmental factors (such as anchor ice, high stream flows, disease, etc.), and high angler use (harvest and delayed hooking mortality). Other factors such as invertebrate production, connectivity, available spawning habitat, overwintering habitat and others may be contributing to the decline as well.

Despite the downward trend in fish numbers, we received only a few calls of concerns from the angling public in 2020. In particular, anglers noticed the lack of Rainbow Trout. Rainbows were traditionally stocked in the 1970s and 1980s before we switched to cutthroat. The Rainbows that remain are wild and self-sustaining. They presumably spawn in the lower reaches of the North Tongue and make their way upstream. In an effort to find a reason for the decline in fish numbers, our Fish Lab in Laramie ran a disease profile. While bacterial and viral tests came back negative, they did find *Myxobolus cerebralis*, the parasite that causes whirling disease (WD). It is unclear at this point how WD is affecting the population, but it could certainly have an additive component to the other factors mentioned above. We are going to delve into the WD issue more in 2021 with a closer look at the health of smaller fish (young of year and age-1 fish). In light of this new discovery, it is very important for anglers to take initiative to clean and disinfect waders and boots before traveling to other waters.

In 2018 we conducted an intensive creel survey on the North Tongue. From June through September we estimated that 7,106 anglers fished 23,690 hours; catching 35,800 fish. Fishing pressure (angling hours) increased 40% while the number of anglers increased 19% since the previous creel survey in 1999. The total number of fish caught actually decreased 5% despite the large increase in the number of anglers. During this survey we asked anglers if they would be in favor of extending the Catch and Release regulation downstream. An overwhelming majority were in favor of extending the regulation further downstream to Burgess Road (FS Rd 15), an additional 4.6 river miles. There appears to be pretty good support for the regulation extension and we will pursue this change in the 2022 regulation cycle.



Population trends over the last 10 years at six of our sampling stations on the North Tongue River. Figure left is for the stations outside the Catch and Release portion, while figure right is for the stations within the Catch and Release portion.



Some Frequently Asked Questions

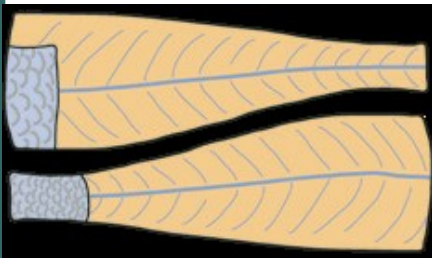


An example of an artificial light that can be thrown overboard and used for fishing.

Every year we receive several calls from anglers requesting information, most of which can be found in the fishing regulation booklet. Our regulations may seem confusing to some, so we'll try to clarify a few of the more common questions.

1). **How many fish can I keep?** We refer folks to the pages in the Regulation Booklet with the Area Exceptions first. Look up your water that you'll be fishing. If there are exceptions listed, those are the creel limits (or other exceptions such as horsepower restriction). If there are no exceptions listed, the Statewide creel limits for individual species are listed on page 3 of the 2021 Fishing Regulations. For fun, let's say you are going to fish Keyhole Reservoir. On the exceptions page, Keyhole has a creel limit of three (3) Northern Pike that must be greater than 36 inches. No other species are listed, so the rest of the species within Keyhole fall under the Statewide limits. So, you could keep three (3) Northern Pike, six (6) Channel Catfish, six (6) Largemouth or Smallmouth Bass in combination, and fifty (50) Yellow Perch, Crappie, Bluegill, Green Sunfish, and Freshwater Drum in combination. So on the best day ever, you could theoretically keep 71 gamefish from Keyhole Reservoir.

2). **How many rods/lines/tip-ups can I use?** This can be found on page 21 of the Fishing Regulations. During open water a maximum of two (2) rods can be used with no line having more than three (3) single hooked devices (six single hooked devices total between the two rods). During ice coverage, the same rule applies unless the waterbody is listed under the Special Ice Fishing Provision. This provision allows for up to six (6) lines or tip-ups on designated waters. In the Sheridan Region, only Lake DeSmet and Keyhole Reservoir fall under this provision.



An example of keeping a portion of skin at least one-inch square for fish identification.

3a). **Why do I need to keep a portion of skin on the fish fillet?** This allows for fish identification. In waters with different limits for different species, the skin gives us the ability to identify species. For example, the fillet of a 14-inch Walleye and a 14-inch Sauger are very similar, yet there are different creel limits for the two species. This regulation applies to all fish species and all Wyoming waters. A skinless fillet could mean a citation from our wardens. 3b). **What do I do when length limits apply?** If a waterbody has a length limit for a particular species, the whole body of the fish shall remain intact (gills and entrails can be removed). This gives us the ability to check for a legal-sized fish.

4). **Can I use artificial light to fish?** Artificial light may be used with legal fishing methods. This changed a few years ago. Whether you catch your limit in 10 minutes with light, or 6 hours without light, the creel and possession limit regulate how many fish can be kept.

5). **What is considered artificial flies and lures?** Artificial means man-made with the use of wood, metal, plastic, thread, feathers, and hair to resemble worms, eggs, fish, or other aquatic organisms. Artificial **Does Not** include natural or prepared organic food stuffs, or chemical attractants, regardless if the chemical attractant is added during the manufacturing process or applied afterward. For instance, your basic "Mr. Twister" plastic jig is artificial, but a Berkley Powerbait Minnow is not considered artificial because they have been impregnated with chemical attractants. Use or possession is prohibited on waters where fishing is permitted by artificial flies and lures only. Muddy Guard Reservoir #1 and the North Tongue River would be examples in the Sheridan Region of where this regulation applies.



Two examples of artificial bait that are NOT considered artificial because they have been impregnated with chemical attractants (left). An example of an artificial lure (right), that is made from metal.



Muddy Guard Reservoir #1 Update

This 27-acre gem is secluded in a valley along the face of the Bighorn Mountains, about 16 miles southwest of Buffalo. High productivity supports ample baitfish and crayfish forage and fuels rapid growth of Snake River Cutthroat Trout, Rainbow Trout, Brown Trout, and Tiger Trout. Fishing here feels like you're at a private trophy pond. However, this good fishing is no secret, so special regulations only allow artificial flies and lures and the harvest of one 20-inch or larger wall-hanger. You can beat the crowds during the week, though and there's ample shoreline access. It's also a great place for your float-tube, kayak, or canoe. If the parking lot still looks too crowded for you, try fishing next door at Muddy Guard #2, which harbors some truly large Brown Trout.

Snake River Cutthroat Trout and Rainbow Trout are the two main species managed at Muddy Guard #1. Brown Trout are wild in the drainage and Tiger Trout are stocked in lower numbers than other species. In total, the fishery is maintained by stocking about 900 trout fingerlings per year. Extra Brook Trout were stocked in 2019 to sweeten the pot but are not consistently stocked. We'd like to know if you catch one! We survey Muddy Guard #1 with trap nets that allow us to acquire our measurements and release fish unharmed. In 2020, cutthroat remained most abundant and were in good condition, averaging 16.3 inches and 1.82 lbs! The largest cutthroat was 20.7 inches! They are beautiful fish too – see the picture above. Rainbow Trout numbers held steady and the fish were large. The average length of rainbows in 2020 was 18.6 inches! Tiger Trout remain somewhat elusive, but we've consistently surveyed one or two per year in the range of 18 – 20 inches. We also hear reports from anglers about the nice Tiger Trout they catch, which is good news too.



A nice Snake River Cutthroat Trout from Muddy Guard Reservoir #1!!



A nice Muddy Guard #1 Tiger Trout (left) and Rainbow Trout (right).



C B & Q Reservoir

Many small stock ponds and reservoirs provide a variety of places to fish in the Newcastle and Upton area. We do our best to maintain access and good fishing at your favorite public waters as well as develop new places to fish when opportunities arise. The water supply reservoir at the [Cedar Pines Golf Course](#), run by the “Best Town on Earth,” was enrolled as a walk-in fishing area in 2018. You will find this shallow productive pond two miles northeast of Upton, just off of Highway 116. Parking is allowed near the clubhouse, where you will find a full bar for lunch inside! It's a good place to take a canoe or car-top boat. We stock 1,000 rainbow trout at a length of about 8 inches every spring. Rainbows that survived their first summer grew well and exceeded 13 inches by early 2020. You can also catch black bullhead.



A rainbow at C B & Q Reservoir.

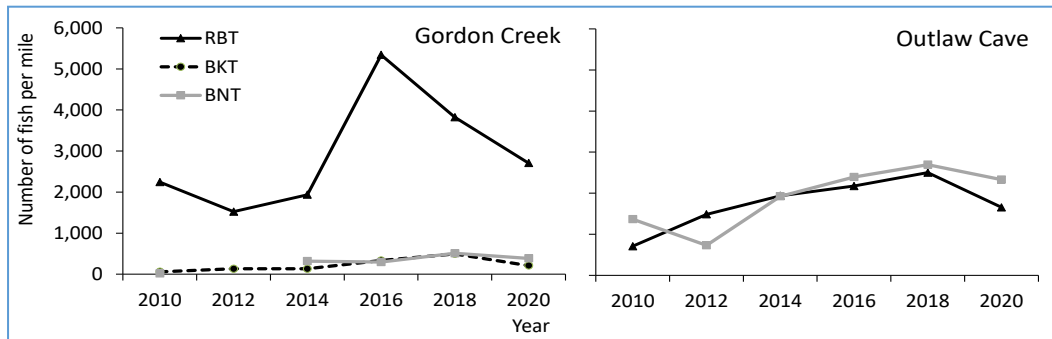
Middle Fork Powder River



A canyon view – There are fish down there!

Look no further than outlaw country for an adventure – even the fish are wild! Spectacular scenery and history combine with ample rainbow, brown, and brook trout at the Middle Fork Powder River. It is worth the effort to experience this unique mid-sized stream that leaves the southern Bighorn Mountains eastward to flow through the town of Kaycee, and beyond I-90. Butch Cassidy and the Wild Bunch laid-low in the secluded confines of the canyon after their marauding adventures. You can follow their trail right to one of the caves they once used as a hideout. The landscape here reminded Butch of where he grew up in southern Utah. The productive geology, cascading cold water, and deeply carved pools remind the trout to grow big.

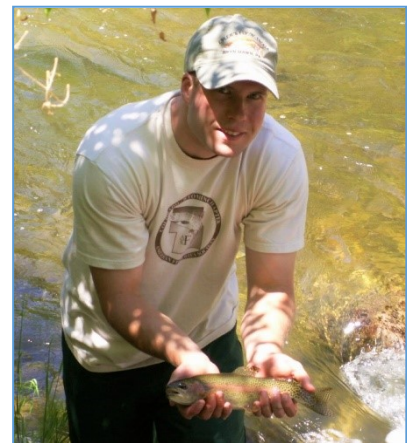
The upper reach of the Middle Fork is accessible at a primitive BLM campground along the Hazelton Road, about 45 miles south of Highway 16, or about the same distance northwest of Kaycee via the Mayoworth-Slip Road. The overall number of trout bigger than 6 inches had dropped a little in 2020 from a recent all-time high. Surveys still showed an impressive abundance of trout (4,296 fish per mile!). Rainbow Trout were 83% of the population in 2020. The number of Brown Trout was slightly down. The average size was 8.3 in for rainbows and 10.4 in for brown trout. Rainbows from 10 to 12 inches were common and the largest brown trout was 21 inches, which is a true heart-stopper in a stream this small – see the picture! If you're looking for a quiet place to fish and get away from it all, including people, this is it.



Population trends for trout ≥ 6 inches at two reaches of the Middle Fork Powder River.



A really nice Brown Trout – anywhere!



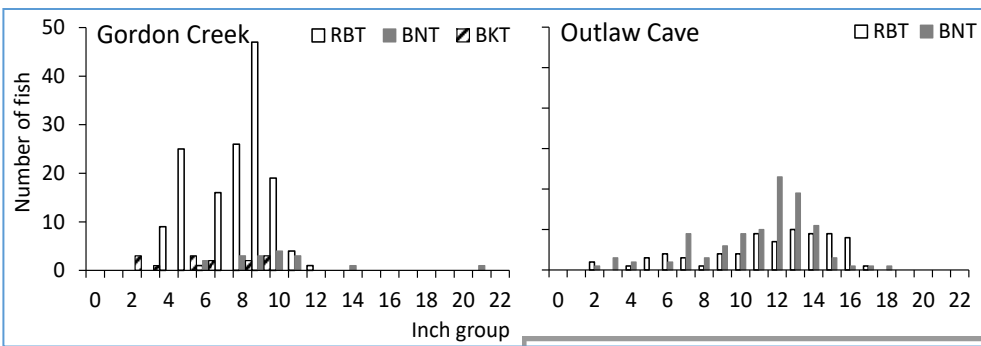
A happy angler with an average rainbow.

Middle Fork Continued

When you drop off the canyon rim to fish the lower reach of the Middle Fork you must know that you can make it back up! This section is accessible at several points along a BLM and State maintained access road about 25 miles southwest of Kaycee via highway 191/190 and the Bar C Road. Primitive camping sites are available at the BLM's Outlaw Cave campground. Overall trout numbers also dropped a little in 2020 at the Outlaw Cave reach compared to 2018, mostly owed to fewer rainbows. However, the number of trout remained on par with much bigger rivers in the region (4,266 fish/mile). The trout population in the Outlaw Cave reach is an even mix of rainbows and browns, with the average fish measuring close to 12 inches. Trout in the 14 to 16 inch range are common, with a few at 18 inches! Take a trip and experience a taste of the wild off the beaten path.



A spectacular place!!



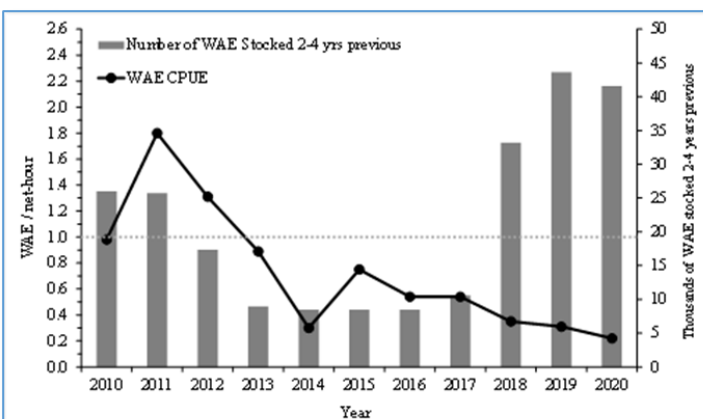
Sizes of trout sampled from two reaches of the Middle Fork Powder River in 2020.

L A K Reservoir

Walleye abundance continued to slide at LAK in 2020 despite consistent stocking in recent years. On a positive note, walleye in our 2020 sample were large, averaging 20.0 inches and 3.27 lbs. The largest walleye was 25.7 inches and all fish were in great condition. Game and Fish stocks about 10,000 Walleye fingerlings (1.5 to 3 inches long) at LAK annually from [Garrison Dam National Fish Hatchery](#) in North Dakota. We are unsure why the walleye population has not bounced back. Green Sunfish numbers remain very low, so they have little influence. However, Yellow Perch numbers are on the rise and may, in part, explain the Walleye decline. An increase in large perch (measuring at least 8 inches) attracted anglers but also increased predation on stocked walleye fingerlings. We requested large Walleye fingerlings (3.0 to 5.0 inches) for LAK but they are rarely available. At least for now, if you catch Walleye at LAK it will likely be big. Anglers also continue reporting nice-sized Tiger Musky.



A big Yellow Perch at LAK.



An average Walleye at LAK.

Lake DeSmet Update



A nice-sized Rainbow Trout from DeSmet.



A tasty Kokanee Salmon at DeSmet.



A floating gill net, part of our annual netting surveys on Lake DeSmet.

Things are looking up at Lake DeSmet. Yes, the Rainbow Trout fishery has really struggled in recent years – but we've seen recent signs that might turn it around and our fingers are crossed. Hatchery improvements with the Eagle Lake strain of Rainbow Trout have Game and Fish giving them another shot at Lake DeSmet. Overall gill net catch rates for Rainbow Trout rebounded slightly in 2020 and around 50% of rainbows sampled were Eagle Lake strain (the other 50% being fall strain). That was a big improvement compared to 2019 when Eagle Lake rainbows were rare. The average rainbow measured about 13.5 inches in 2020, and the largest was 18.2 inches. Anglers reported "catching a lot of small rainbows" on good days at the lake, suggesting that the recently stocked cohorts survived well and showed promise for the years to come.

Kokanee are doing very well at Lake DeSmet. Kokanee are landlocked Sockeye Salmon. They live mostly "off shore" and filter feed in open water for small crustaceans called zooplankton. Zooplankton remain plentiful and will continue supporting good kokanee and trout growth at DeSmet. About 40,000 fingerling Kokanee (3 -4 inches) were stocked in April, 2019. These fish averaged a little over 13 inches when they reached age 2 in 2020. This represented good growth and they were in very good condition. In fact, some kokanee reached maturity in 2020 and turned red. We expect the bulk of the 2019 cohort to mature in 2021 at age 3. It's reasonable to expect some kokanee to reach the 17 to 19 inch range at Lake DeSmet by late 2021! They can be a little tricky to figure out, often concentrating in schools at various depths where they find the most zooplankton. Spend some time researching techniques online with your morning coffee and talk to anglers at the lake going after them and it will be worth the effort.

Big Walleye, Lake Trout, and Brown Trout are still common at Lake DeSmet. The overall catch rate of Walleye in our 2020 surveys, as well as the number of large Walleye (bigger than 20 inches) declined from previous years. That said, there were still some very big Walleye at DeSmet. The largest Walleye we caught in 2020 was nearly 29 inches and 13.1 lbs! We also sampled Brown Trout up to 30 inches and 14.5 lbs. Reports of large Lake Trout (some over 20 lbs) are on the rise and many anglers are now successfully targeting small Lake Trout in the 18-inch range. These predatory fish challenge the Rainbow Trout fishery, but they also provide a good chance to catch a trophy! Don't be afraid to take home a big one for the wall, or a batch of small lakers for dinner.



A bruiser of a Walleye (left) and a trophy Brown (right) from our 2020 sampling of DeSmet.



Healy Reservoir: How Many Bass Are In That Lake?

The answer: Exactly 2,614 that measure at least 9 inches ... just kidding, about the "exactly" part anyway. We used an electrofishing boat to sample Largemouth Bass at Healy on six occasions in early 2020. We tagged fish each time we surveyed and tracked individual fish throughout the surveys with a technique called a Schnabel mark-recapture population estimate. So, 2,614 actually was our estimated population size for Largemouth Bass at Healy in 2020. Of course, it's a ballpark number with a measure of error around it. Every population estimate is just that – a best scientific calculation. In reality there were somewhere between 1,659 to 4,244 bass of that size in the lake. The 2020 estimate was nearly double the estimate from 2017, mostly due to an increase in small fish, under 12 inches. That was a good sign for the future of the Healy bass fishery. Following trends in the estimated population size helps Game and Fish evaluate our management. We will repeat this population estimate survey in 2025 and it will help us decide if the bass fishery still looks ok, or if management changes are necessary to help keep the fishing good. If you catch a tagged bass it was part of this study. Give us a call with the tag number and we can tell you how big it was when we tagged it.



A nice Largemouth Bass with a Floy tag near the dorsal fin.

The annual gill net survey at Healy Reservoir yielded lots of small Yellow Perch in 2020, which was no surprise. That said, we were surprised that the average size of perch further declined to 6.3 inches. The largest fish was a mere 7.6 inches, indicating that few perch over 8 inches were out there. Age data collected from perch showed that they were growing much slower at Healy than at other lakes, because they are over-populated. In fact, the average-sized perch at Healy is about 5 to 6 years old. Average growth would produce a 6-inch perch in 2 to 3 years, based on data published in fisheries reference books! Your support to improve the perch fishery was heard loud and clear in creel card comments. We are working on it and stocked Walleye fingerlings in 2020 to build a population of predators that will prey on small perch and thin the population. In the past, adult Walleye were stocked at Healy but never successfully reproduced, which means that we can control their numbers with stocking. We also reduced the number of Tiger Musky stocked at Healy to relieve some pressure on the big perch. There are still plenty of nice tigers out there!



A nice Healy Reservoir Tiger Musky!



Family fun at Healy!

East Iron Creek Reservoir

Far-east Wyoming has few places to catch quality-sized Rainbow Trout, which measure at least 16 inches in length. East Iron Creek Reservoir on USFS land northeast of Upton is known as one of those places. Shallow, productive habitat at this water is a double-edged sword. Occasional winterkill sets this fishery back, but recovery is swift. Unfortunately, a winterkill occurred in 2018-2019 and the only fish observed during a survey in 2019 were fathead minnows. We restocked it promptly with 1,000 Rainbow Trout at a length of about 8 inches. These fish made it through the winter of 2019-2020, averaging 13.6 inches and 1.04 lbs when surveyed in 2020! They were in great condition, too. In fact, the largest fish was already almost 15 inches, suggesting that quality fish will be found here in 2021. Plan your trip for dry weather and it will be worth it. You will head south from Highway 116 about 8.5 miles northeast of Upton. Then you'll follow a 5-mile long, rough and largely unimproved route along Aldredge Road #913 (west and south) and #913G (east). Remember, dry weather only!



A beautiful day at East Iron Creek Reservoir!



A beautiful view of Peggy Lake.

Cloud Peak Wilderness Lakes

The warm summer months draw people to the high country to experience a little alpine bliss. We are no exception to that rule, and spend at least one week per year surveying wilderness lakes. There are enough lakes in the Cloud Peak Wilderness that we can only get to them about every five to ten years, jumping from drainage to drainage. We survey the lakes with lightweight gill nets, fishing gear, and a packable raft. Most of the lakes with fish are stocked by helicopter and the surveys help us make adjustments to species and numbers, when necessary to maintain good fishing. We visited four lakes in the Highland Park area and one near Circle Park in 2020.

Lake	Species	# Sampled	Length Range (inches)
Elephanthead	Golden Trout	13	6.7 – 10.7
Highland Park	Brook Trout	11	7.0 – 10.4
	Rainbow Trout	1	10.3
Myrtle ¹	Golden Trout	4	11.7 – 12.5
Peggy ²	Brook Trout	.	8.0 – 11.0
Ringbone	Brook Trout	2	6.0 – 7.8
	Grayling	1	11.1
	Tiger Trout	1	8.3
	Yellowstone Cutt.	1	8.7

¹Golden Trout that measured about 14 inches lost from net.

²Visually surveyed on the way to Elephanthead Lake.



The outlet at Elephanthead Lake.

For questions about wilderness regulations please contact the Bighorn National Forest at 307-674-2600. For questions about specific lakes, stocking, regulations or management, please contact us here in the Sheridan Regional Office at 307-672-7418.



A gorgeous Myrtle Lake Golden Trout (left) and setting a net at Elephanthead Lake (right).

Alpine Reservoirs: Cloud Peak, Willow Park, and Twin Lakes

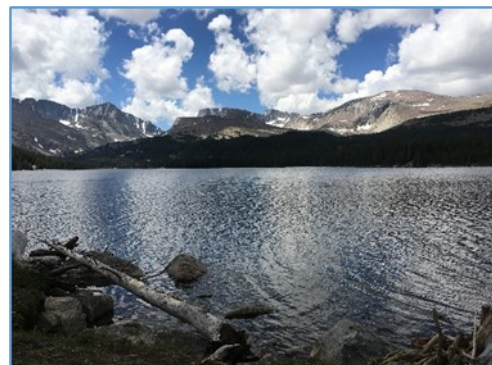
Cloud Peak Reservoir sits high in the Piney Creek drainage, right on the edge of the wilderness area. It's accessible by foot or horseback from Forest Service trails #038 (Solitude Trail), #130, and #082. Or, you can ATV to Cloud Peak Reservoir up the northeast end of trail #038 outside the wilderness area. It's a long, rough ride any way you travel, but well worth it. Based on our 2020 survey, fishing should be excellent with plenty of Brook Trout, up to 13 inches and in very good condition. We also sampled Tiger Trout in the 7 to 13 inch range.

Willow Park Reservoir is also a high mountain water storage lake that's a bit off the beaten path, although a lot closer to civilization than Cloud Peak Reservoir. The "easiest" way to get there would be on ATV or motorcycle from Penrose Park, along FS trails #320, #033, and #038. Brook Trout were abundant and we sampled many in the 5.7 – 12.5 inch range. We stock Tiger Trout here to thin the Brook Trout population. Tiger Trout survived very well in the reservoir and are also abundant, with fish sampled up to 13 inches. They were game for very fast action with a fly rod in the evenings, which was great fun. There is also a wild Yellowstone Cutthroat trout population at Willow Park, so take a close look at what you catch – you might get a trifecta.

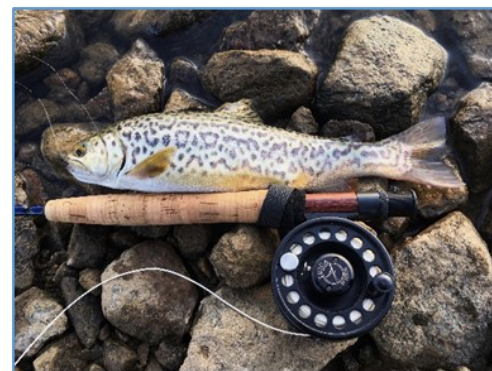
Upper Twin Lakes Reservoir, also a high mountain water storage lake, is relatively easy to access with a drive up Red-Grade Road and about 1/4 mile walk. This fishery consists of a wild Lake Trout and Brook Trout fishery with supplemental stocking of cutthroat. However, over the last several surveys, we haven't even found a cutthroat. Our thought is that the cutthroat are being preyed upon by the larger Lake Trout. In 2020 we switched our stocking scheme from Yellowstone Cutthroat to Rainbow Trout. These rainbows are a little bigger when stocked compared to the cutthroat. It is our hope that they'll perform better going forward.



A 15-pound Lake Trout sampled in 2020 from Twin Lakes Reservoir.



A picturesque view of Cloud Peak Reservoir.



A colorful Willow Park Reservoir Tiger Trout.

Upton Centennial Ponds

Tucked within a narrow stretch of Thunder Basin National Grasslands, southwest of Upton on Hwy 116, three ponds provide a decent warm-water fishery. The only one that we can really sample is the middle pond, or Upton #2. This pond is completely a wild fishery comprised of Black Crappie, Bluegill, Green Sunfish, Largemouth Bass, and Yellow Perch. The crappie and perch are of decent size with most hovering around 7 to 8 inches. The bass fishery is pretty impressive for such a small pond! The average bass is around 11 inches with a few dandies approaching the 20-inch mark!



A nice 4-pound Largemouth Bass from Upton Centennial Pond #2.

Sheridan Region AIS update

The Sheridan region Aquatic Invasive Species (AIS) crew inspected 10,065 watercraft in 2020. Of those, 1,175 were high risk; meaning they were last used on a water that is known to be infested with quagga or zebra mussels or the watercraft contained standing water from a state that has known mussel populations. Three watercraft entered check stations with mussels attached and underwent a complete decontamination to eliminate the risk of transporting AIS to the watercraft's destination. Thankfully all mussels found were nonviable and were able to be easily removed.

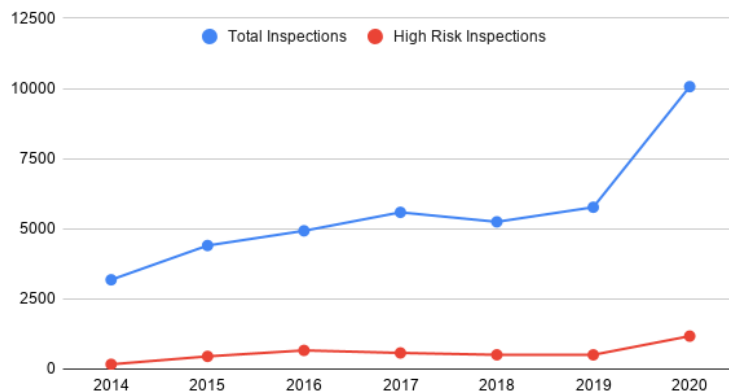
The amount of traffic in 2020 through Sheridan region AIS check stations increased 74.5% from the 5,768 inspections conducted in 2019. Unfortunately, we also saw an increase of boats entering our check station with their bilge plugs in. In 2017, AIS regulations were modified to include "all bilge and ballast plugs and other barriers that prevent water drainage from a watercraft shall be removed or remain open while a watercraft is transported by land within the state". Standing water creates an increased risk for transporting AIS, as it creates an environment that allows organisms to remain viable while they are transported over land. It is important to make sure you **Clean, Drain and Dry** not only your boat but any other equipment used to reduce the chance of AIS being transported.

Statewide, two new AIS populations were detected through sampling efforts that occurred at 376 sites in 2020. Rusty crayfish were found in the Laramie River, Bluegrass Creek, and some private ponds in the Laramie Mountain Range, and another population of New Zealand mudsnails was identified on the Salt River at Batemans boat ramp.

Within the Sheridan Region we currently have populations of Asian clams (Keyhole Reservoir), brook stickleback (Goose, Turner, Montana and Beaver creeks) and curly pondweed (Keyhole Reservoir and Lake DeSmet).

It is great seeing record numbers of watercraft users through our check stations and to see so many people enjoying all of the great opportunities our waters offer. We would be unable to continue protecting our waters without the compliance and continued practice of **Clean, Drain, Dry** by outdoor recreators. Thank you for your assistance! If you any question related to AIS refer to our website at: <https://wgfd.wyo.gov/Fishing-and-Boating/Aquatic-Invasive-Species-Prevention>

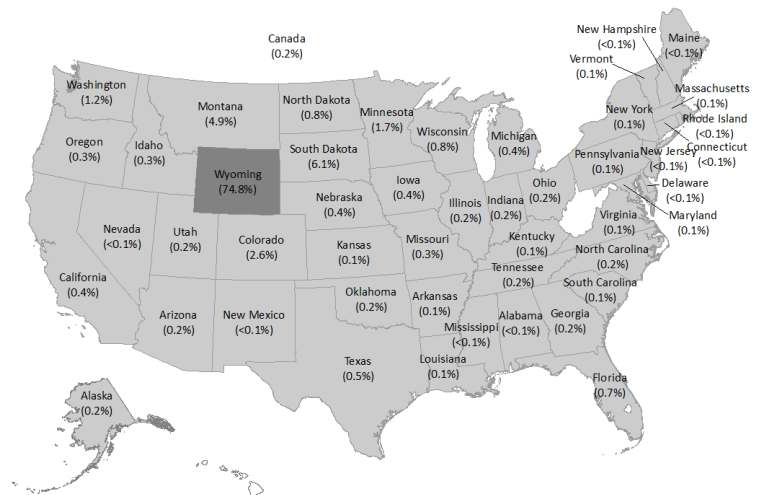
Sheridan Region Yearly AIS Watercraft Inspections



Top: Mussels attached to a sailboat steering prop. This boat originated from Lake Ontario Canada on its way to Washington state. It was decontaminated at the Sheridan check station.

Middle: Graph showing the total number of inspections and high risk inspections at Sheridan Region check stations. Certainly a large increase in 2020.

Bottom: U.S. map describing boater origination prior to inspection. 74.8% of boats were from Wyoming, while 25.2% were from out of state. Sheridan Region check stations saw boats from all other states (except WV) and Canada.



*Help prevent the spread of harmful Aquatic Invasive Species
by becoming a Wyoming certified inspector!*

2021 Watercraft Inspection Training for the Public



CASPER

April 17th; 9:00am - 4:00pm
Casper WGF Regional Office
3030 Energy Lane, Casper WY 82604

CODY

May 14th; 9:00am - 4:00pm
Cody WGF Regional Office,
2820 State Highway 120, Cody WY 82414

CHEYENNE

May 8th; 9:00am - 4:00pm
Cheyenne Headquarters,
5400 Bishop Blvd, Cheyenne WY 82006



EVANSTON

April 10th; 9:00am - 4:00pm
Bear Community Center
75 Bear River Dr, Evanston WY 82930

GERING, NE

April 17th; 9:00am - 4:00pm
Legacy of the Plains Museum
2930 Old Oregon Trail, Gering NE
69341

GREEN RIVER

April 17th; 9:00am - 4:00pm
Green River WGF Regional Office 351
Astle Ave, Green River WY 82935

JACKSON

June 19th; 9:00am - 4:00pm
Jackson WGF Regional Office 420 N
Cache, Jackson WY 83001

LANDER

May 1st; 9:00am - 4:00pm
Lander WGF Regional Office
260 Buena Vista Dr, Lander WY 82520

RAWLINS

May 15th; 9:00am - 4:00pm
Jeffrey Center,
315 W Pine St, Rawlins WY 82301

SPEARFISH, SD

April 25th; 9:00am - 4:00pm
RecStation.net,
3595 E Colorado Blvd, Spearfish SD
57783

SHERIDAN

May 7th; 9:00am - 4:00pm
Sheridan WGF Regional Office 700
Valley View Dr., Sheridan, WY 82801

Aquatic Invasive Species (AIS) can be aquatic animals such as zebra and quagga mussels or rusty crayfish, or aquatic vegetation such as hydrilla. These AIS can have far-reaching impacts on our water resources. Many of these species permanently change stream and lake ecology, negatively affecting native species and our prized sport fisheries. Zebra and quagga mussels can attach to water infrastructure and equipment causing damage. These species are often called "aquatic hitchhikers" because they can hitch a ride on boats, equipment, or in any water that is not drained.

The Wyoming Game and Fish Department is offering several watercraft inspection trainings in 2021. These trainings will provide the skills necessary to inspect your own watercraft and certify you to inspect other watercraft as well. The trainings include information on basic biology, impacts, transport vectors and distribution of AIS. It includes classroom instruction, a question and answer session, and a hands-on watercraft inspection exercise.

The trainings are free and open to anyone interested in preventing the spread of AIS through watercraft inspection. These trainings are being offered as a one-day course (9:00a - 4:00p). Registration deadline is one week prior to the class start date. Limited to 20 people per course for most locations.

To register: contact Josh Leonard, AIS Coordinator at (307) 721-1374 or joshua.leonard@wyo.gov. Please provide your name, mailing address, phone number, and email address. Or register online using google chrom at: <https://forms.gle/2himTEBee8C22ZLt9>
Visit: wgfd.wyo.gov/AIS for more information about AIS.



Conserving Wildlife
Serving People



Wyoming Game and Fish Dept.
Sheridan Regional Office
700 Valley View Dr
Sheridan, WY 82801
307-672-7418

wgfd.wyo.gov

Follow WGFD on Face
Book and YouTube

Wyoming Game and Fish Department - "Conserving Wildlife - Serving People"

Important Dates to Remember in 2021

- April 1st, 2021. **AIS check stations** open across the Cowboy State.
- May 6th and 7th, 2021. **Digital Wyoming Outdoor Expo:** The Wyoming Game and Fish Department will be hosting our Expo digitally in 2021. Please visit <https://wgfd.wyo.gov/education> for additional details.
- June 5th, 2021. **Wyoming's Free Fishing Day.** June 5th, 2021 is Free Fishing Day to coincide with the beginning of National Fishing and Boating week. Residents and nonresidents may fish Wyoming waters (excluding Wind River Indian Reservation and Yellowstone National Park) without a fishing license or conservation stamp this first Saturday in June.



Upcoming Work for 2021

Thanks for taking time to view our newsletter! Please feel free to stop by our office, give us a call, or catch us out in the field. We are always happy to answer questions about fish and fishing opportunities in the Sheridan Region. Below is a list of projects upcoming for the 2021 field season. Stay tuned for updates on these waters in our next newsletter. Happy Fishing!!

- Sampling on DeSmet, Keyhole, Tie Hack, Upper Twin, Park, Big Horn, LAK, Muddy Guard #1 and #2, Geier, Sibley, Weston, and Sawmill reservoirs.
- Sampling on smaller waters such as Kleenburn Ponds, Sawmill Lakes #1 and #2, Cook Lake, and Black Hills Power and Light (Osage).
- Population estimates on several reaches on the South Tongue River, Sand Creek, and Clear Creek.
- Native stream surveys on the Powder River, Crazy Woman Creek, and several streams in the Cheyenne River drainage.
- Radio telemetry project to start on the Powder River and lower Clear Creek to track fish movement throughout those systems (should be pretty darn cool).
- A reminder to boaters that our AIS check stations will be up and running this summer at the Sheridan Visitors Center, Beulah Visitors Center, Keyhole Reservoir, and occasionally Lake DeSmet.



Paul Mavrakis: Fisheries Management



Gordon Edwards: Fisheries Management



Reed Moore: AIS Specialist



Travis Cundy:
Aquatic Habitat Program



Andrew Nikirk: Fisheries Management